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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/022,754	12/14/2001	Yevgeniy Eugene Shteyn	US018202	2525

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EXAMINER

ZHOU, TING

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/022,754	Applicant(s) SHTEYN, YEVGENIY EUGENE	
	Examiner Ting Zhou	Art Unit 2173	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4 and 6-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-2, 4 and 6-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The amendment filed on 15 March 2007 have been received and entered. Claims 1-2, 4 and 6-9 as amended are pending in the application.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 7 and 9 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

MPEP 2106.01 reads as follows:

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data.

When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to data structure stored on a computer readable medium that increases computer efficiency held statutory) and *Warmerdam*, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory).

In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's

functionality to be realized, and is thus statutory. See Lowry, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

3. Claim 7 defines a software application. However, the claim does not define a computer-readable medium or memory and is thus non-statutory for that reason (i.e., "When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized" - MPEP 2106.01). Claim 7 is directed to software, per se, lacking any hardware to enable functionality to be realized. Therefore, the claimed features of claim 7 is actually a software, or at best, directed to an arrangement of software, and software claimed by itself, without being executed or implemented on a computer medium is not statutory. That is, the scope of the presently claimed software application can range from paper on which the program is written, to a program simply contemplated and memorized by a person. Claim 9 is rejected for similar reasons. Any amendment to the claim should be commensurate with its corresponding disclosure.

4. To expedite a complete examination of the instant application, the claims rejected under 35 U.S.C. 101 (nonstatutory) above are further rejected as set forth below in anticipation of the applicant amending these claims to place them within the four statutory categories of invention.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 1-2, and 6-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Vandermeijden U.S. Patent 7,143,043.

Referring to claims 1 and 7, Vandermeijden teaches a device and software application comprising an ambiguous first data input system configured to associate a first user input with a plurality of potential data (ambiguous key entry that is associated with a plurality of characters) (column 1, line 51-column 2, line 27); a second data system receiving a second user input (voice input) (column 1, line 51-column 2, line 27), the second user input being unassociated with the received first user input (as can be seen from Figure 1, the voice input 102 and key input 104 are distinct from each other and separately input into the system); and a processing unit coupled to the first and second input systems receiving the plurality of potential data and the second user

input substantially simultaneously (the voice input and key selection are received substantially simultaneously) (column 14, lines 3-11) and selecting one of the plurality of potential data based on the second user input (the voice input is analyzed to identify the intended character) (column 14, lines 3-11), wherein the first data input system comprises a manual input device (manual key input) (column 1, line 51-column 2, line 27 and further shown by reference character 104 in Figure 1), and the second data input system is a speech recognition input system, a handwriting input system or a stylus input system (speech input system) (column 1, line 51-column 2, line 27 and further shown by reference character 102 in Figure 1).

Referring to claim 2, Vandermeijden teaches a display coupled to the processing unit and configured to display the selected potential data (once the particular character has been identified, it can be displayed on a display screen) (column 7, lines 48-55).

Referring to claim 6, Vandermeijden teaches wherein the processing unit further determines the selected data based on a dictionary database internally or remotely accessed (a built-in dictionary can be consulted to disambiguate user input) (column 1, lines 39-42).

Referring to claims 8-9, Vandermeijden teaches wherein the first data input system comprises a real or virtual keyboard configured to associate a specific keystroke with a plurality of graphical characters (keyboard 210 shown in Figure 2 is used to enter key input, each key input being associated with a plurality of characters) (column 4, lines 56-67).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vandermeijden U.S. Patent 7,143,043, as applied to claim 1 above, and Grover et al. U.S. Patent 5,818,437 (hereinafter "Grover").

Referring to claim 4, Vandermeijden teaches all of the limitations as applied to claim 1 above. However, although Vandermeijden teaches a keyboard for input, Vandermeijden fails to explicitly teach the first data input system comprises a touch-sensitive screen. Grover teaches a disambiguation system for recognizing inputs similar to that of Vandermeijden. In addition, Grover further teaches a data input system that comprises a touch sensitive screen (touch-screen keypad displayed in Figure 1) (Grover: column 3, lines 58-63). It would have been obvious to one of ordinary skill in the art, having the teachings of Vandermeijden and Grover before him at the time the invention was made, to modify the method for using a keyboard to input a key selection of Vandermeijden to include the touch-screen keyboard taught by Grover. One would have been motivated to make such a combination in order to eliminate the size-limiting component of the physical keyboard in portable computers; the use of a virtual keypad displayed on a touch-sensitive screen would eliminate the need for a big and bulky physical keyboard, allowing users to easily and accurately input data on a very small device, such as a cell phone or PDA.

Response to Arguments

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7. Applicant's arguments with respect to claims 1-2, 4 and 6-9 have been considered but are moot in view of the new ground(s) of rejection.

8. With respect to claim 7, the examiner appreciates the applicant's attempt to overcome the 101 rejection by amending the claim language. However, the examiner respectfully argues that the claim is still non-statutory. The claim recites, "A software application comprising instructions, which when loaded into a processing unit causes the processing unit to...". This language states that *when* the program is loaded into a processing unit, certain steps are performed, however, the program is not necessarily always loaded into the processing unit; furthermore, the processing unit is not defined to necessarily include a computer readable medium or other such memory device. As an *example*, the examiner respectfully notes that claim limitation such as "A software application comprising instructions loaded into a device memory to perform the steps of..." is statutory because the program is embodied on a memory device, whereas, the presently claimed software application lacks such a memory device and is therefore, just a software program comprising instructions.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

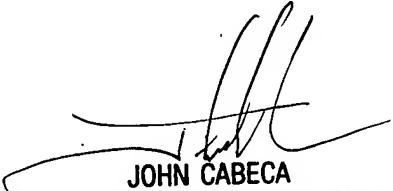
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ting Zhou whose telephone number is (571) 272-4058. The examiner can normally be reached on Monday - Friday 7:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca can be reached at (571) 272-4048. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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